

# DART SERVICE INSTRUCTION

## TO AMEND INSTALLATION INSTRUCTIONS D206-559 Rev. L AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-559 REV. 3

REF CANADIAN STC: SH92-17

REF FAA STC: SH1031NE

REF LBA STC: 0796/3034

REF JCAB STC: STC-90-TYO

REF BRAZIL STC: 2010S10-08

### 1.0 PURPOSE

The purpose of this Dart Service Instruction is to add the D407-559-115 Bearpaw Kit to this approval. The D407-559-115 Bearpaw Kit is designed to be compatible with D206-642-311/-312/-313/-314/-411/-412/-413/-414 Skidtubes equipped with D206-642-XXX Run-On Landing Wearplates. The D407-559-115 Bearpaw Kit is also compatible with the D206-642-XXX Skidtubes equipped with standard wearplates/wearshoes.

### 2.0 INSTALLATION

To install D407-559-115 Bearpaw Kit on Dart D206-642-XXX Skidtubes equipped with D206-642-XXX Run-On Landing Wearplates refer to Figures 1 & 2 of this Service Instruction as well as the following:

- 2.1 Jack up the aircraft and ensure the skidtubes are serviceable in accordance with ICA-D206-642.
- 2.2 Position D2432-3 Bearpaw on the aft end of each skidtube so that the bearpaw clamps are located on either side of the aft saddle as shown in Figure 1a - 1c of this Service Instruction. The bearpaws should be installed over the run-on landing wearplates.
- 2.3 Attach the D4011-1 Clamps with D4012-1 Cushions using hardware shown in Figure 2 of this Service Instruction. Additional AN960JD416 (or NAS1149D0463J) washers may be installed under the nuts to ensure 1.5-4 threads in safety on the bolts. Although not generally necessary, it is also acceptable to replace the AN4-20A bolts with longer or shorter AN4 bolts, if required.



**CAUTION:** The torque on the nuts should be limited to 20 in-lb (2.3 Nm)

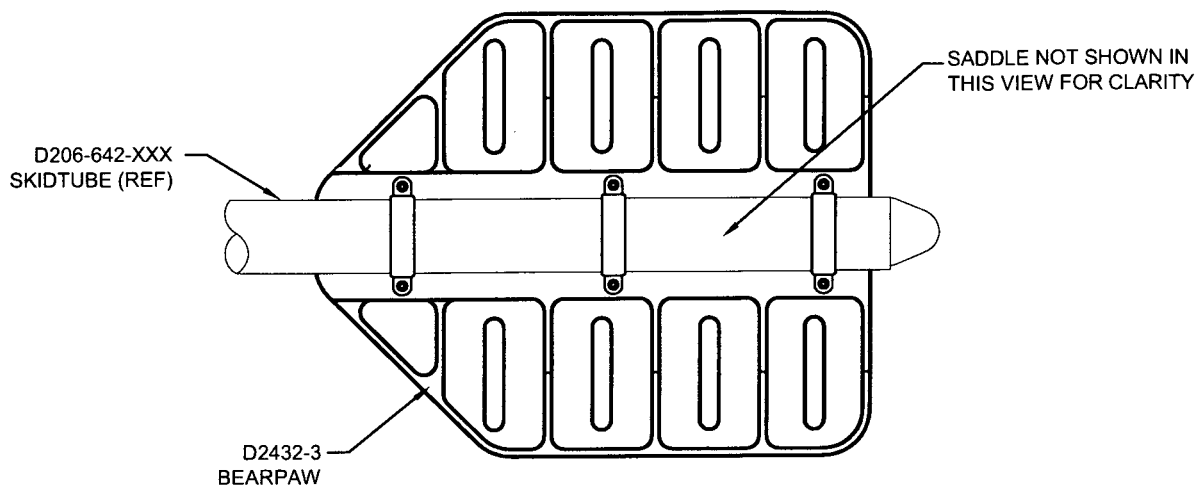
- 2.4 Lower the aircraft.
- 2.5 Update the aircraft log book to indicate installation of the D407-559-115 Bearpaw Kit and adjust the empty weight and balance record for the rotorcraft with the information given in section 5.0 of this service instruction.

### 3.0 MAINTENANCE

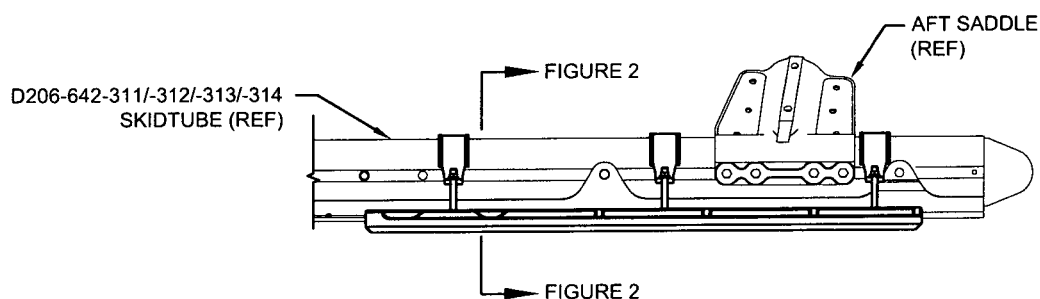
The D407-559-115 Bearpaw Kit should be maintained in accordance with ICA-D206-559.

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| D. SHEPHERD (DE # 02)  |   |
| DATE:  | 12.07.05  |
| CERT. NO.:   | SH92-17   |
| ISSUE NO.:   | 7   |

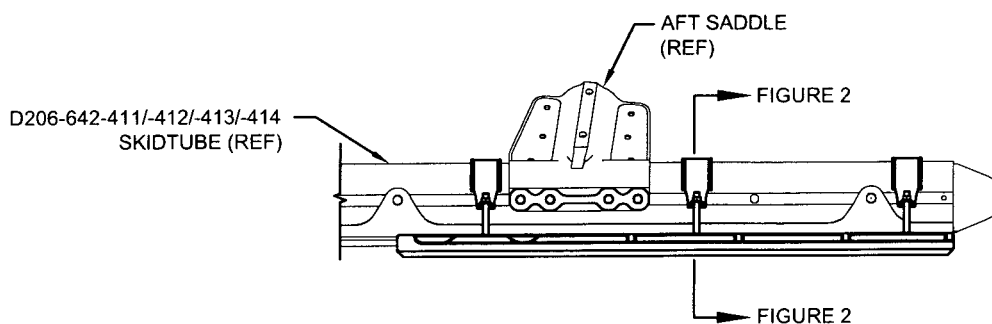
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| A  | NEW ISSUE   | AP                                     | 12.07.05     |
| REV.   | DESCRIPTION   | BY                                     | DATE         |
| DESIGN   | AP  | DART AEROSPACE LTD                     |              |
| DRAWN  | AP  | HAWKESBURY, ONTARIO, CANADA            |              |
| CHECKED  | 90  | DRAWING NO.                            | REV. A       |
| MFG. APPR.   | N/A   | DSI 9624                               | SHEET 1 OF 4 |
| APPROVED   |  | TITLE                                  | SCALE        |
| DE APPR.   |  | BEARPAW INSTALLATION                   | NTS          |
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**Figure 1a - Bearpaw Location  
(Top View)**



**Figure 1b - Bearpaw Installation (Side View)  
(Installed on D206-642-311/-312/-313/-314 Skidtubes)**



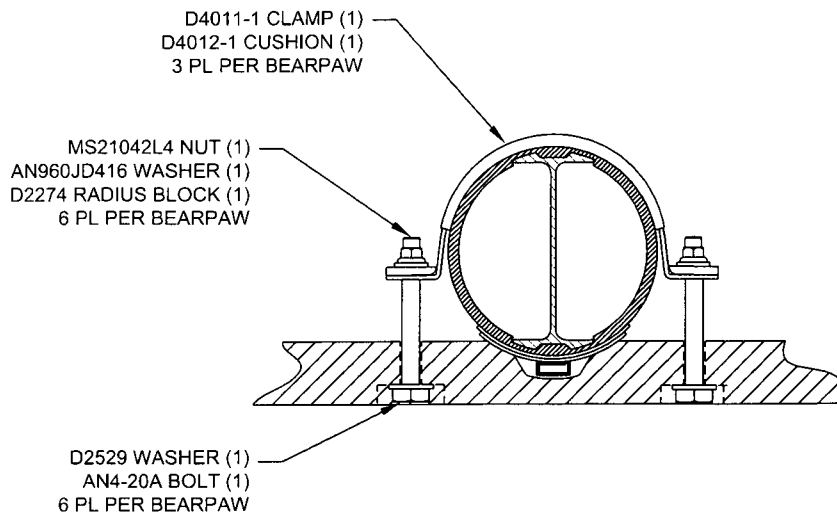
**Figure 1c - Bearpaw Installation (Side View)  
(Installed on D206-642-411/-412/-413/-414 Skidtubes)**

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**Figure 2 - D4011-1 Clamp Installation**

#### 4.0 PARTS LIST

| QTY<br>-115 | PART NUMBER  | DESCRIPTION            |
|-------------|--------------|------------------------|
|             | D407-559-115 | BEARPAW INSTALLATION   |
| 12          | D2274        | RADIUS BLOCK           |
| 12          | D2529        | WASHER                 |
| 2           | D2432-3      | BEARPAW                |
| 6           | D4011-1      | CLAMP                  |
| 6           | D4012-1      | CUSHION                |
| 12          | AN4-20A      | BOLT                   |
| 12          | AN960JD416   | WASHER (NAS1149D0463J) |
| 12          | MS21042L4    | NUT                    |

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## 5.0 WEIGHT AND BALANCE


| INSTALLATION   | WEIGHT             | LATERAL         |                       | LONGITUDINAL     |                          |
|--|--------------------|-----------------|-----------------------|------------------|--------------------------|
|  |                    | ARM             | MOMENT                | ARM              | MOMENT                   |
| <b>D407-559-115</b><br><b>Bearpaw installation</b><br>(Bell 407 High Gear)     | 13.9 lb<br>6.30 kg | 0.0 in<br>0.0 m | 0.0 in-lb<br>0.0 m-kg | 148 in<br>3.76 m | 2057 in-lb<br>23.69 m-kg |
| <b>D407-559-115</b><br><b>Bearpaw installation</b><br>(Bell 206L/407 Low Gear) | 13.9 lb<br>6.30 kg | 0.0 in<br>0.0 m | 0.0 in-lb<br>0.0 m-kg | 149 in<br>3.78 m | 2071 in-lb<br>23.81 m-kg |
| <b>D407-559-115</b><br><b>Bearpaw installation</b><br>(Bell 206 L High Gear)   | 13.9 lb<br>6.30 kg | 0.0 in<br>0.0 m | 0.0 in-lb<br>0.0 m-kg | 157 in<br>3.99 m | 2182 in-lb<br>25.14 m-kg |

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